

#### 2009 Annual Convening of Service-Learning Leaders Maryland State Department of Education Service-Learning Unit

Assateague Island Beach Clean-up

**Primary Subject:** Science 8

**Grade Level:** 8

#### **Additional Subject Area Connections:**

RELA, Math, and History **Unit Title:** Beach Clean Up

Type(s) of Service: Direct

**Unit Description:** Environmental Science. Students learn about the impact of human actions on the natural environment.

# **Potential Service-Learning Action Experiences:** Students participate in a beach clean up at Assateague Island State Park.

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#### Maryland State Curriculum Indicators Met

#### **Science VSC:**

1. B. 1

Review data from a simple experiment, summarize the data, and construct a logical argument about the cause-and-effect relationships in the experiment.

#### 1. C. 1. a

Organize and present data in tables and graphs and identify relationships they reveal.

#### 1. C. 1. B.

Interpret tables and graphs produced by others and describe in words the relationships they show.

#### 6. A. 1. c:

Identify and describe how the natural change processes may be affected by human activities.

-Beach Preservation

#### 6. B. 1. a

Identify and describe a local, regional, or global environmental issue.

#### 6. B. 1. b

Identify and describe how human activities produce changes in natural processes:

## Alignment with Maryland's Best Practices of Service-Learning:

Assateague Island Beach Clean-up

#### 1. Meet a recognized community need

Being surrounded by water living on the Eastern Shore, we recognized the need to keep our coastal areas clean. Assateague Island State Park in Berlin, MD, works with many middle and elementary schools to provide environmental educational programs. These projects meet growing environmental needs in our area as well as provide opportunities for students to gain service learning hours.

Students become aware of environmental problems by conducting research about marine ecology, pollution in our coastal areas, and ways to stop pollution and encourage more recycling.

#### 2. Achieve curricular objectives through service-learning

Science- cause and effect relationships and environmental issues RELA- Writing
Math-Graphing
History-Community awareness

#### 3. Reflect throughout the service-learning experience

Students reflected on the project in each of their core content classes:

Math: Analyzing the data on the trash we collected using the Ocean Conservancy's coastal clean up data cards.

Science: Graphing their results of the data analysis, as well as science content connections relating pollution and marine ecology.

History: Making posters to raise awareness of marine pollution.

RELA: Writing reflective essays.



### 4. Develop student responsibility (Students have opportunities to make decisions about the service-learning project.)

Students are broken into groups during the actual clean up. Leadership roles consist of keeping track of locations where cleaning takes place, data recording, tallying information when complete, and carrying the bags while on the clean up. Students usually make this day a competition; therefore, we have those students that are the driving forces to try to get as much stuff picked up as possible.

#### 5. Establish community partnerships

We worked with Assateague State Park, SSL coordinator, building teachers and staff

#### 6. Plan ahead for service-learning

The first thing we did was contact the Assateague State Park and coordinate the project. All the specific details were outlined and the goals were determined. A letter was written to all the parents of the students involved explaining the service learning project. In Science, students research pollution, cause and effect relationships, and some marine ecology. In History class, the students review the history of Assateague Island.

#### 7. Equip students with knowledge and skills needed for service

Students learned about marine debris, how long it takes common trash items to decompose, and its danger to sea birds, and marine ecology. Students also gained writing experience in RELA by completing their reflective writing piece. In addition, analytical and graphing skills were sharpened as well as their ability to make their community aware of this continuing problem by making posters. Students also determined how they each can make a difference to the environment.